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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/083,735	02/26/2002	Yiu Chau Chau	144 P 023	2572

26568 7590 07/27/2004

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200 WEST ADAMS STREET  
CHICAGO, IL 60606

EXAMINER
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CINTINS, IVARS C

ART UNIT	PAPER NUMBER
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1724

DATE MAILED: 07/27/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/083,735	<b>Applicant(s)</b> CHAU, YIU CHAU	
	<b>Examiner</b> Ivars C. Cintins	<b>Art Unit</b> 1724	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 17 May 2004.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-5, 7-18, 20-23 and 25-34 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-5, 7-18, 20-23, 25-28 and 34 is/are allowed.
- 6) ☒ Claim(s) 29-33 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

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The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 29-31 and 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Heinz (U.S. Patent No. 146,590). As pointed out in the previous Office action, the reference discloses a water treatment unit comprising: a housing having a transverse dimension which is substantially greater than its height (see Fig. 1); a substantially vertical outer wall and two substantially vertical inner walls, which walls define a first chamber **C**, a second chamber **D**, and a third chamber **G** therebetween; a bottom wall and a top wall **E** closing the housing; a discharge **d** from the housing within the inner wall; a finely divided treatment medium positioned in the first chamber (see the left column, lines 19-20) such that water flows transversely through this medium; and a second treatment media in the device (see the left column, lines 38-39).

Accordingly, this reference discloses the claimed invention with the exception of the location of the second treatment media (claims 29-31) and the relative volume of the untreated and treated water reservoirs (claim 33). However, it would have been obvious to one of ordinary skill in the art at the time the invention was made to locate the second treatment media of the reference in the second chamber **D** instead of the third chamber **G**, in order to produce a more compact filtration system. Also, it would have been obvious to one of ordinary skill in the art at the time the invention was made to construct the reference device such that the untreated water chamber has a smaller volume than the treated water chamber, in order to produce a smaller overall unit which can be located in a smaller space in a home or Office.

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Claim 32 is rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant's admitted prior art in view of Heinz. Applicant has admitted (see Fig. 2; and page 7, paragraph 0031 of the specification) that coffee makers having water treatment units which discharge directly to the brewing compartment are known. Claim 32 differs from this admittedly known coffee maker by the specific type of water treatment unit employed, and the lack of an untreated water mixing element. Heinz teaches a water treatment unit of the type recited; and it would have been obvious to one of ordinary skill in the art at the time the invention was made to substitute the water treatment unit of Heinz for the water treatment unit of the admittedly known coffee maker, since this secondary reference water treatment unit is capable of filtering water prior to brewing coffee in substantially the same manner as the water treatment unit of the admittedly known coffee maker, to produce substantially the same results. Also, it would have been obvious to one of ordinary skill in the art at the time the invention was made to dispense with the untreated water mixing element of the admittedly known coffee maker, thus utilizing only purified water to make coffee, in order to ensure that this coffee is not contaminated by impurities (e.g. lead) which may be present in the untreated water.

Applicant's arguments filed May 17, 2004 have been noted and carefully considered but are not deemed to be persuasive of patentability. Applicant argues that it would not have been obvious to put treatment media in chamber **D** of Heinz because this would interfere with the settling purpose of this chamber. It is pointed out, however, that one of ordinary skill in the liquid purification art would readily recognize that if the filtration material from chamber **G** were located in chamber **D**, then this settling function would not be necessary, since the filtration material now in this chamber would remove any solids which would normally have settled in this

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chamber if it were empty. Applicant also argues that the flow through chamber **D** is not transverse because it flows through openings **b** at the bottom of this chamber and out through openings **d** at the top of this chamber. Again, this argument has been noted and carefully considered, but is not deemed to be persuasive of patentability. It is pointed out that the flow through chamber **D** is clearly from its outer circumferential wall to its inner circumferential wall, and this flow pattern is deemed to be transverse. The fact that this flow may also have some upward vertical flow component does not negate that fact that it flows transversely through this chamber.

Applicant also argues that the coffee maker of Fig. 2 provides mixing of treated water with untreated water, whereas claim 32 precludes such mixing with untreated water. Again, this argument has been noted and carefully considered, but is not deemed to be persuasive of patentability. It is pointed out that one of ordinary skill in the coffee making art would readily recognize that if untreated water in a particular location contains impurities (e.g. lead) which are clearly undesirable in coffee, then this untreated water should not be employed to make this coffee. Accordingly, this skilled artisan would have been motivated to modify the coffee maker of Fig. 2 to dispense with the untreated water mixing element, thus utilizing only purified water to make coffee, in order to ensure that this coffee is fit for human consumption.

Applicant also argues that Heinz fails to suggest sizing the untreated water chamber such that it has a smaller volume than the treated water chamber, as required by claim 33. It is pointed out, however, that one of ordinary skill in the water purification art would readily recognize that if storage space were a consideration, then one could still produce the same amount of treated water (i.e. the volume of the treated water chamber) by utilizing a smaller

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untreated water chamber, and repeatedly filling this smaller untreated water chamber with untreated water, until the desired volume of treated water is produced.

Claims 1-5, 7-18, 20-23, 25-28 and 34 are allowed.

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to I. Cintins whose telephone number is (571) 272-1155. The examiner can normally be reached on Monday through Friday from 8:30 AM to 5:00 PM. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Duane Smith, can be reached at (571) 272-1166.

The centralized facsimile number for the USPTO is (703) 872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

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applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



**Ivars C. Cintins**  
**Primary Examiner**  
**Art Unit 1724**

I. Cintins  
July 25, 2004